

Listing of Claims

This listing of claims will replace all prior versions and listings of claims in the Application.

1. (ORIGINAL) A motor-driven pump adapted for being submersed in fluid comprising:

an electric motor disposed in a motor housing, the motor containing a rotating shaft extending to and supporting an impeller;

a motor cover fitted to the motor housing to enclose the motor, at least one of the motor housing and the motor cover being provided with a pour hole through which a non-conductive encapsulation material may be poured to encapsulate the motor;

an impeller housing that surrounds the impeller and including a fluid inlet and a fluid discharge conduit for fluid flow; and

a multistage seal disposed between the motor and the impeller that prevents fluid from contacting the motor.

2. (ORIGINAL) The motor-driven pump of claim 1, wherein the motor cover is fitted on the motor housing by cooperating latch means.

3. (ORIGINAL) The motor-driven pump of claim 1, wherein the non-conductive encapsulation material is an epoxy.

4. (WITHDRAWN) The motor-driven pump of claim 1, wherein an impeller cover is secured to the impeller housing with an o-ring disposed therebetween to prevent fluid from leaking out from within the interior of the impeller housing.

5. (ORIGINAL) The motor-driven pump of claim 1, wherein a void space is provided between the impeller and the seal to reduce fluid pressure build-up on the seal.

6. (ORIGINAL) The motor-driven pump of claim 1, wherein the seal comprises a self-aligning seal.

7. (ORIGINAL) The motor driven pump of claim 6 wherein:
the self-aligning seal comprises a flexible sheet-like member including an undersize bore and fitted over the shaft between the impeller and the motor.
8. (ORIGINAL) The motor-driven pump of claim 6, wherein the seal comprises a lip seal disposed between the self-aligning seal and the motor.
9. (ORIGINAL) The motor-driven pump of claim 8, wherein the seal further comprises a moisture barrier disposed between the lip seal and the motor.
10. (ORIGINAL) The motor-driven pump of claim 9, wherein:
the moisture barrier comprises grease packing disposed in a cavity formed in a bracket member of the motor.
11. (ORIGINAL) The motor-driven pump of claim 1 further comprising electrical grounding circuit that electrically neutralizes the environment in which the motor-driven pump operates.
12. (ORIGINAL) The motor-driven pump of claim 11, wherein the grounding circuit comprises a first ground wire attached to the motor and to a wall of the motor housing and a second ground wire connected on one end of a wall of the motor housing and spaced from the connection of the first ground wire to the motor housing.
13. (ORIGINAL) The motor-driven pump of claim 11, wherein the motor housing is stainless steel and resistant to fluids that are highly corrosive.

14. (ORIGINAL) A motor-driven pump capable of being submersed in fluid comprising:

a polymer-encapsulated motor encased in a motor housing, the motor containing a rotating shaft extending to and supporting an impeller;

a motor cover fitted to the motor housing to enclose the motor, the motor cover being provided with a pour hole through which polymer encapsulation material may be poured to encapsulate the motor;

an impeller housing that surrounds the impeller with an inlet and discharge outlet for fluid flow; and

a multistage seal disposed between the motor cover and the impeller that prevents fluid from contacting the motor, the multistage seal comprising a self-aligning first lip seal, a second lip seal journaled by a member forming part of the motor and a grease packing moisture barrier.

15. (ORIGINAL) A motor-driven pump adapted for being submersed in fluid comprising:

an electric motor disposed in a motor housing, the motor containing a rotating shaft extending to and supporting an impeller;

a motor cover fitted to the motor housing to enclose the motor, at least one of the motor housing and the motor cover being provided with a pour hole through which a non-conductive encapsulation material may be poured to encapsulate the motor;

an impeller housing that surrounds the impeller and including a fluid inlet and a fluid discharge conduit for fluid flow;

a multistage seal disposed between the motor and the impeller that prevents fluid from contacting the motor, the multistage seal comprising a self-aligning first lip seal, a second lip seal and a grease packing moisture barrier; and

an electrical grounding circuit that electrically neutralizes the environment in which the motor-driven pump operates, wherein the grounding circuit comprises a first ground wire attached to the motor and to a wall of the motor housing and a second ground

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wire connected on one end of a wall of the motor housing and spaced from the connection of the first ground wire to the motor housing.